

Abstract of the Disclosure

A processing chamber actually performs a heating process for a substrate. The processing chamber has an upper plate, a lower plate, and an exhaust opening. The 5 upper plate heats a resist from a front surface of the substrate. The lower plate heats the resist from a rear surface of the substrate. The exhaust opening exhausts gas from the processing chamber. The upper plate is disposed in such a manner that it can be raised and 10 lowered in the processing chamber by an upper air cylinder that composes an upper driving mechanism. The lower plate is disposed on a floor of the processing chamber. The exhaust opening is connected to a pump through a pipe. Heating temperature and heating time of 15 the upper plate and the lower plate are controlled by a heating control portion. A pressure in the processing chamber is controlled by a pump. The pump is controlled by a pressure controlling portion.